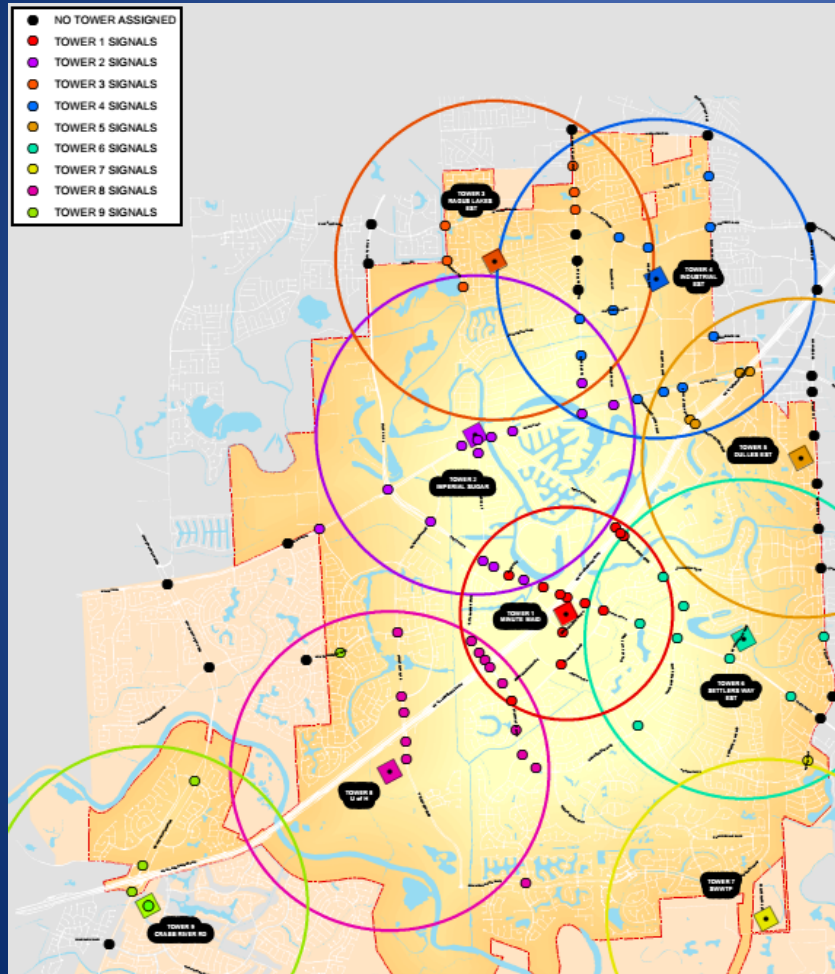


# ITS Overview

- Fiber & 3 Tier Wireless Network
- Traffic Management Center (TMC)
- Central Management System(CMS)
- ITS Website (new)
  - ❖ Support Technology

# ITS Overview



- 3 Tier Wireless Network

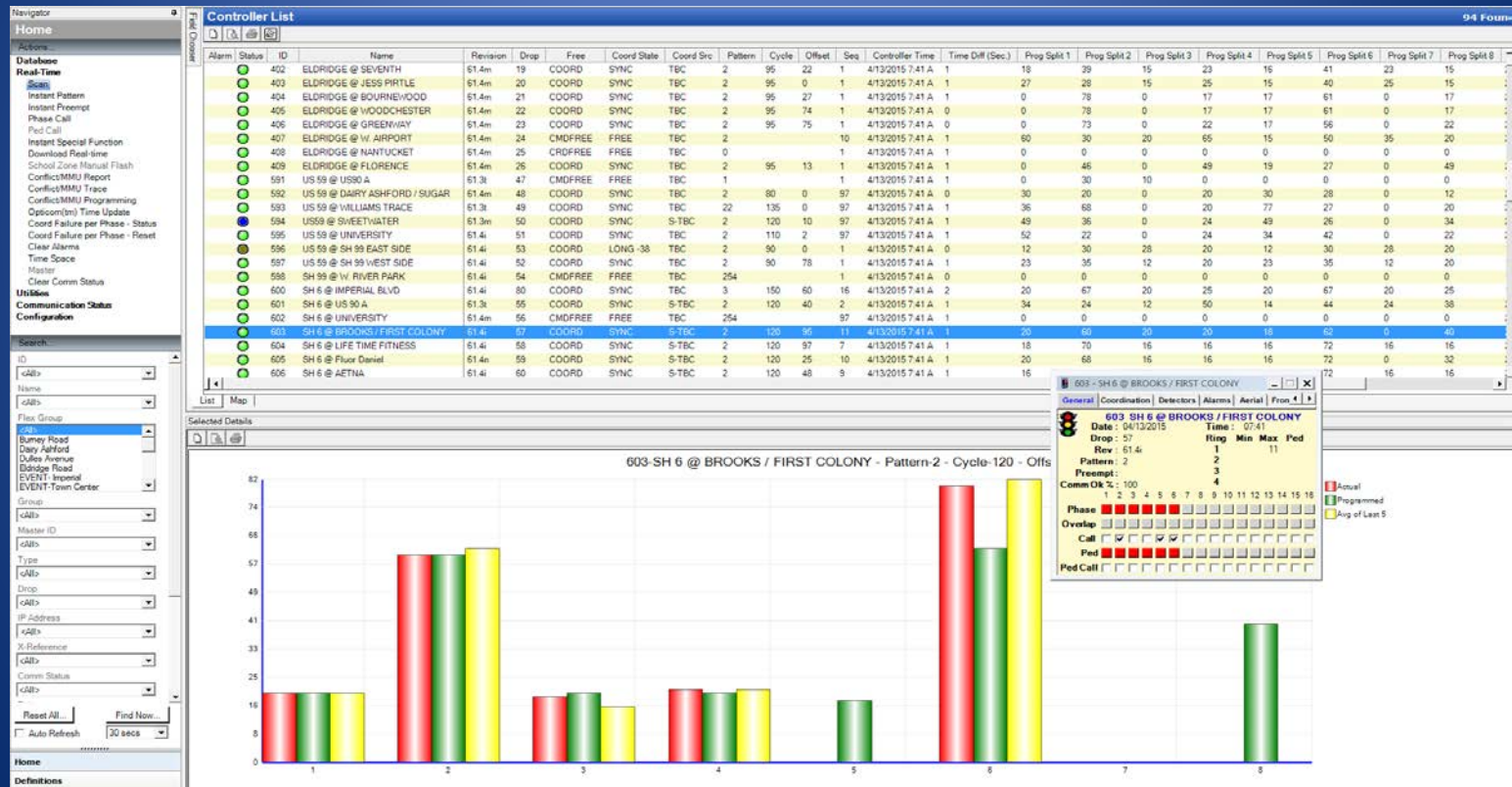
# ITS Overview

- Traffic Management Center



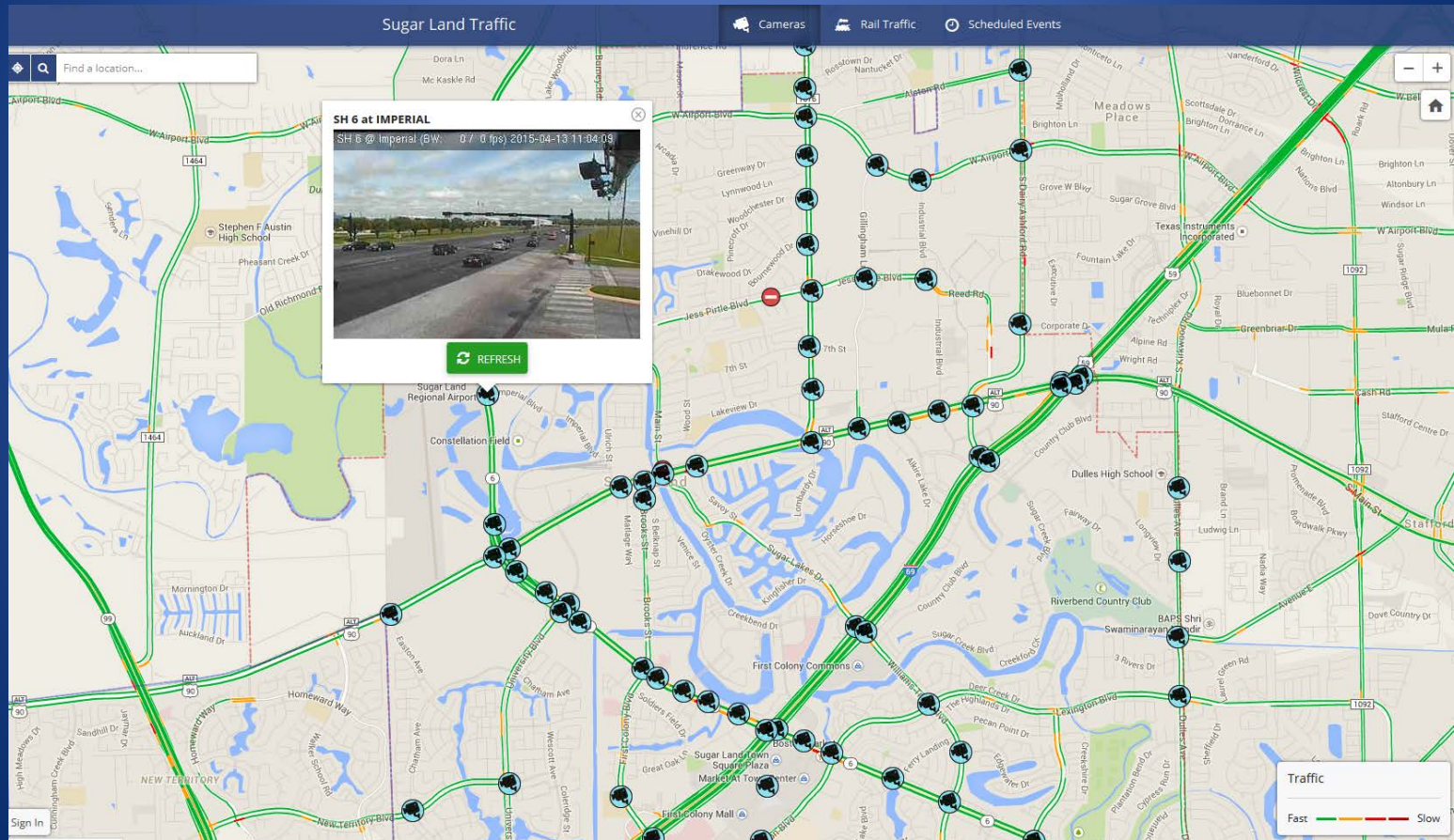


## ■ Central Management System



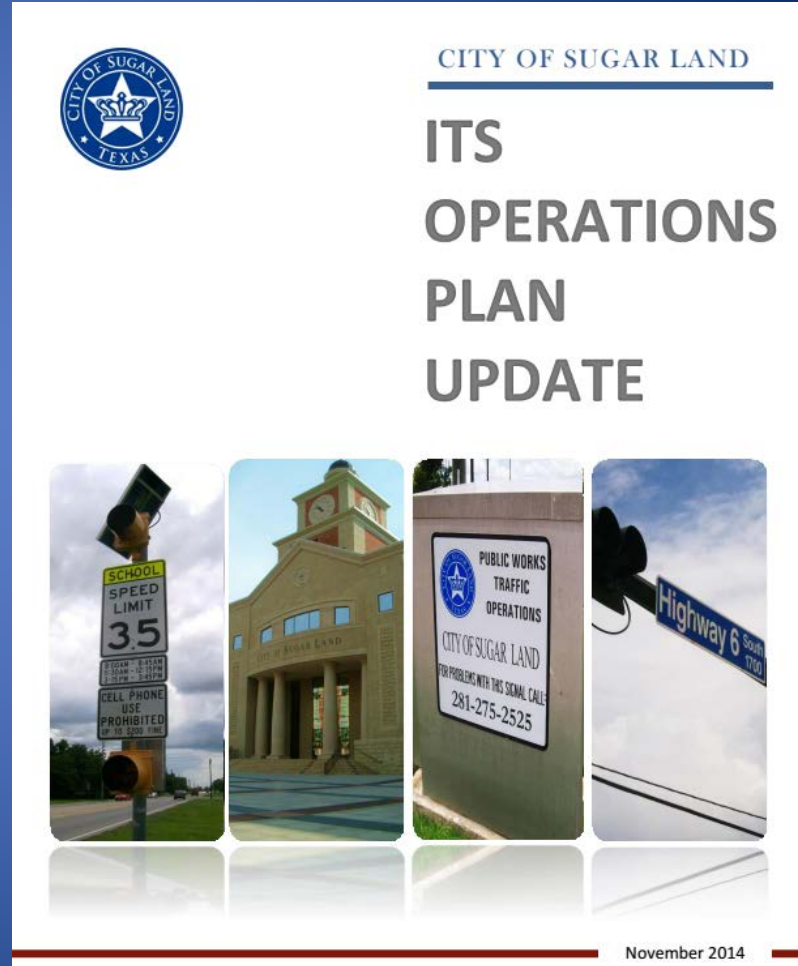
# ITS Overview

- ITS Website ([its.sugarlandtx.gov](http://its.sugarlandtx.gov))



# 2014 ITS Operations Plan

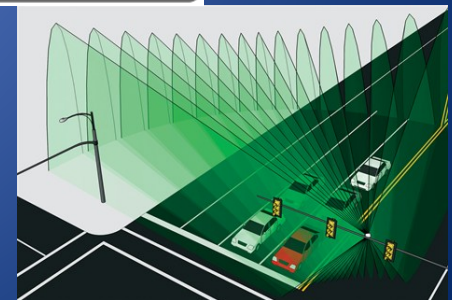
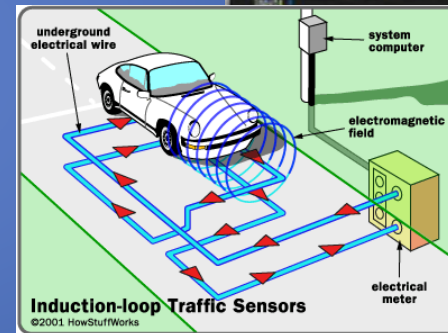
- Upgrade System and Intersection Detection





# Detection Systems

- Video Detection
- Infra-red Detection
- Inductive Loops
- Radar
- Magnetometers

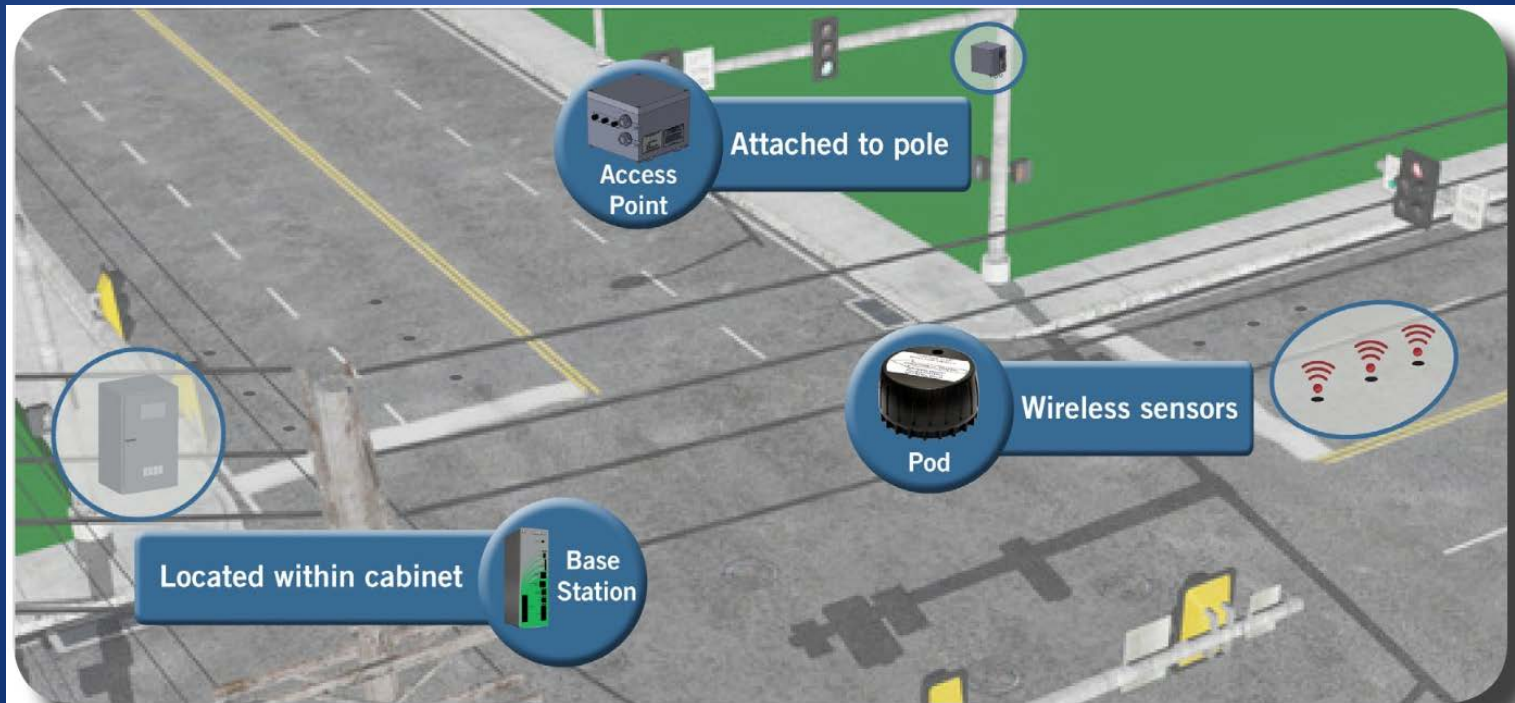


# Trafficware's Solution

- Valence Pod Detection System
- Sugar Land Test Site
- What we Learned
- Patent



# Valence Pod Detection System



# Sugar Land Test Site

- SH6 @ Fluor Daniel
- Installed June 2013
- Expanded Aug 2014
- Cooperative Effort
- Mutually Beneficial



# What We Learned

- Confirmed robust performance in all weather
- Detection Pods may also be used for counting, which reduces cost
- Presence accuracy: >98%<sup>1</sup>
- Count accuracy: 95%<sup>2</sup>

1. Study performed Jan 17, 2014

2. Sugar Land Traffic Engineering



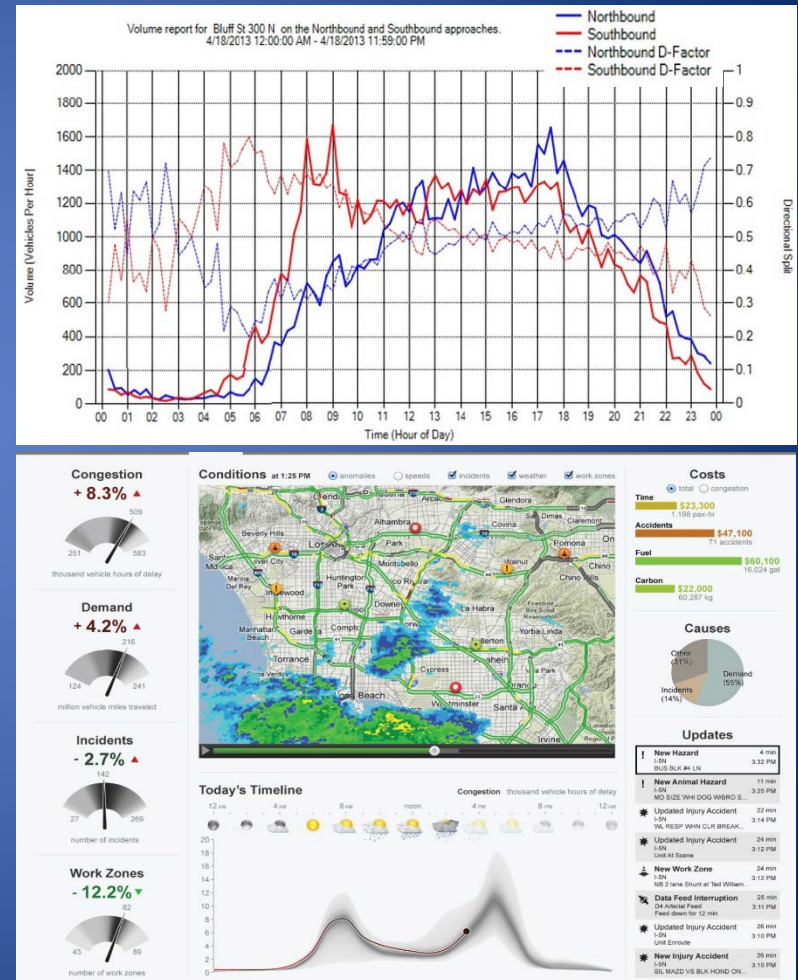
# Patents

- #6,662,099 – M.I.T., Exclusive License
- #8,855,902 – Trafficware, 10/7/2014
- #9,020,742 – Trafficware, 4/28/2015

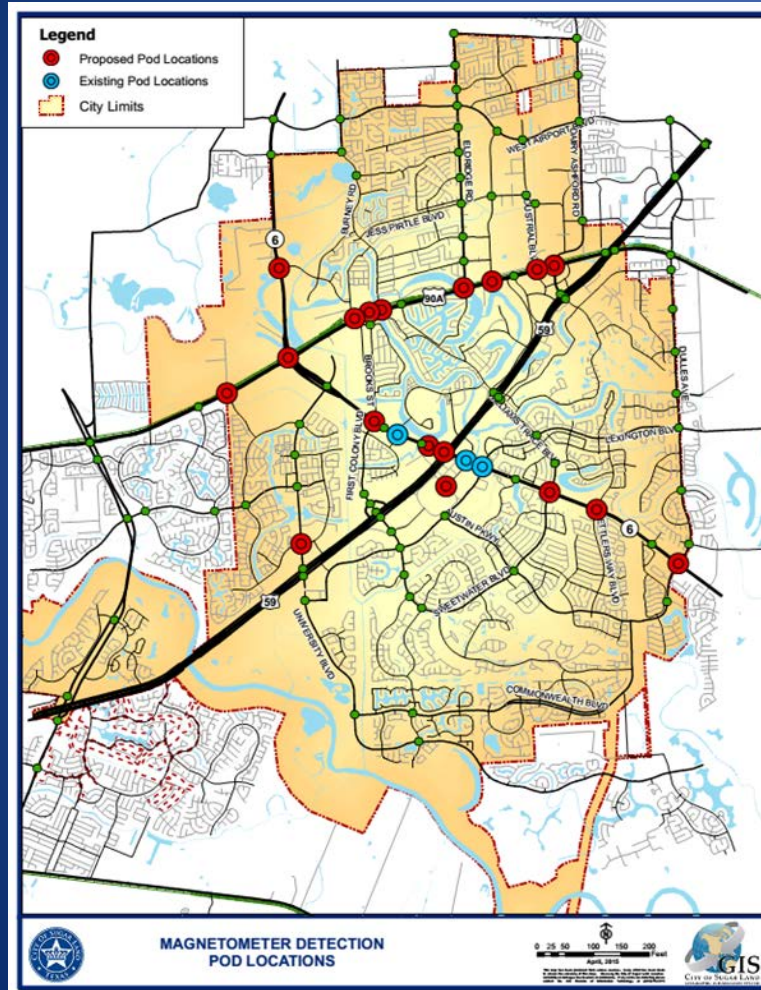


# City's Future ITS

- Performance Measures
- ITS Website Improvements
- Design & Planning
- Adaptive System



# Location Map



- 3 Existing Locations
- 18 New Key Locations
- US 90 & SH 6



# Purchase Overview

- Valence Pod Detection System
- Vendor: Trafficware Group, Inc
- Sole Source Purchase: Only system meets City Specification
- Funding: CIP TR 1503 CIP
- Purchase Amount: \$500,000

# Recommendation

- Authorize the purchase of Trafficware Group, Inc's Valence Pod System in the amount of \$500,000 for FY15 Traffic Signal Detection Upgrade Project.

Questions?